WORK ORDER FOR PROFESSIONAL SERVICES

Prepared by the Office of the City Engineer of Harrisburg

Contract: Municipal Engineering Services **Contract No.:** F2104

This is a Work Order for Professional Services made and entered into under the terms and conditions of the Municipal Engineering Services Agreement between **STOCKWELL ENGINEERS, INC.**, 801 North Phillips Avenue, Suite 100, Sioux Falls, SD 57104, (hereinafter "Engineer") and **CITY OF HARRISBURG**, (hereinafter "Client") executed October 19, 2021.

CLIENT: City of Harrisburg

P.O. Box 26 Harrisburg, 57032 Work Order Title: 272nd Street Roadway

Improvements

Work Order No. 22081

Scope of Services: Engineer will perform services as outlined in the attached *Scope of Basic Services* dated March 10, 2022. In general, this Work Order includes providing professional services to design, bid and administer construction of the above referenced project.

Schedule: The period of service for this Work Order will be ongoing until such time that either party provides 45 day written notification of termination.

Compensation: In consideration of these Services, the Client agrees to pay Engineer compensation as follows:

Basic Compensation: Hourly time and materials basis excluding sales tax, estimated at \$536,000

Additional Services Multiplier: 1.0 times the expense incurred by the Engineer **Reimbursable Expense Multiplier:** 1.0 times the expense incurred by the Engineer

IN WITNESS WHEREOF, this Work Order is accepted on the date last written below, subject to the terms and conditions above stated and the provisions set forth herein.

Signed: Signed: Name (printed): Name (printed): Title: Title: Date: Date:

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SCOPE OF BASIC SERVICES

Date: March 10, 2022 **Client:** City of Harrisburg

Project: 272nd Street Roadway Improvements

Work Order No: 22081

Description: In general, the Project consists of survey, design, plan development, and construction administration services for 272nd Street from Highway 115 to Cliff Avenue. Project limits shall be as identified in the attached illustration.

Attachments: Illustrative map of project limits.

The following is a scope of work meant to describe services to be provided to the Client for the abovementioned project. Work listed below will be completed by Stockwell Engineers, Inc. (Stockwell) unless otherwise stated. Work not explicitly listed shall be considered an additional service. Stockwell to perform services in a phased sequence. Owner to provide such reviews, approvals, and consents from others as may be necessary for completion of each phase or milestone of the Project. Significant changes to previously approved phases shall be considered an additional service. The scope is organized into the following phases.

Phase 1 | Survey

- 1.1 Notify affected property owners of pending survey.
- 1.2 Request permission to survey on private property. Where denied, Client shall negotiate to provide Site access.
- 1.3 Research existing easements and plats of record at county courthouse for properties within and adjacent to the project. Client to provide title search if necessary.
- 1.4 Locate existing boundary markers at the time of the survey.
- 1.5 Establish benchmarks and control points throughout site.
- Locate all existing above ground features within the established survey limits. Take a sufficient frequency of elevation shots to establish reasonable accuracy for contours to be shown on a one foot interval. Provide building floor elevations available at the time of survey through existing exterior doorways made available by Client and/or Owner, as necessary.
- 1.7 Show utilities, above and below ground, located in the field at the time of the survey by the utility companies, Client or other authorized agents of utility companies. Stockwell will contact appropriate One Call System, if available, to arrange for the location of utilities at the time of survey.
- 1.8 Prepare topographic survey utilizing AutoCAD Civil 3D for use in development of plan documents.

Phase 2 | Schematic Design

- 2.1 Coordinate and conduct project kickoff meeting with Client's staff.
- 2.2 Review all background information made available to Stockwell by Client.
- 2.3 Establish list of Stakeholders.
- 2.4 Schedule and Coordinate progress meetings. Prepare and distribute meeting notes to attendees.
- Assist Client in procuring geotechnical or other exploratory service contracts. Client to contract services separately and provide report to be utilized by Stockwell. Stockwell is not responsible for any impact on Client's Project caused by subsurface conditions. Stockwell is entitled to rely on the accuracy of information and services provided by Client's agents.
- 2.6 Recommend location and extent of exploratory services necessary for the Project.
- 2.7 Propose general layout and alignment of improvements. Improvements to be designed to local industry accepted standards. Where available, Stockwell shall implement Client's published standards.
- 2.8 Develop preliminary elevations of the roadway and corridor.
- 2.9 Identify rights-of-way (ROW) and easements required for the Project

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- 2.10 Develop preliminary opinion of estimated construction costs for the Project.
- 2.11 Assist Client in developing overall project budget and funding strategy.
- 2.12 Meet and review preliminary layouts and cost opinions with Client's staff.

Stockwell's services under schematic design phase will be considered complete on the date when Stockwell has reviewed preliminary layouts with Client

Deliverables: Preliminary layouts; and cost opinions.

Phase 3 | Design Development

- 3.1 Layout and design the project improvements based on Client approved preliminary layouts. Design improvements to local industry accepted standards. Where available, Stockwell shall implement Client's published standards.
- 3.2 Design sanitary sewer system within project limits to serve boundary limits approved by Client. Facilities shall be designed to convey wastewater for future land uses as identified by Client.
- 3.3 Design water mains and appurtenances within project limits to Client's standards.
- 3.4 Design drainage facilities to intercept and convey runoff in conformance with Client's standards. Identify watershed boundaries based on best available contour data for the area. Determine runoff potential for minor and major storm events. Evaluate flood conditions and inundation levels.
- 3.5 Coordinate roadway design with drainage facilities and underground utilities. Design roadway pavements in conformance with Client's standards. Client's geotechnical firm to perform California Bearing Ratio (CBR) evaluation of existing site and provide recommendations to Stockwell.
- 3.6 Determine removal limits for the Project Site.
- 3.7 Coordinate and conduct a meeting with private utility companies to review plan development. Utility companies to provide location, size, alignment and elevation of its facilities and report conflicts to Stockwell.
- 3.8 Assist Client with funding applications. Assistance generally includes cost estimates and exhibits to include in applications. Facility plans or other studies necessary to include with funding applications is an additional service.
- 3.9 Prepare 60% design development documents. Where applicable, Stockwell shall utilize Client's drafting standards. Design development documents to contain information suitable for Client to evaluate and provide comments.
- 3.10 Prepare 60% cost opinions.
- 3.11 Submit three copies of design development documents and Stockwell's opinion of probable cost to Client for review.
- 3.12 Submit design development documents to the following entities for comment.
 - 3.12.1 Private Utility Companies.
- 3.13 Meet and review design development documents with Client. Address comments to review documents and incorporate into final deliverables.
- 3.14 Deliver to Client an electronic pdf copy and three paper copies of Stockwell's finalized design development document and cost opinion.

Stockwell's services under design development phase will be considered complete upon delivery of the 60% design development document and cost opinion.

Deliverables: Design Development documents; and cost opinions.

Phase 4 | Construction Documents

- 4.1 Finalize design.
- 4.2 Prepare construction documents. Where applicable, Stockwell shall utilize Client's drafting standards. Construction documents to contain information suitable for contractors to provide construction pricing or bidding. Final construction documents provided by Stockwell will contain the Professional Seal of an Engineer



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- licensed in the State of the project Site and will be suitable for review by permitting agencies with jurisdiction over the project.
- 4.3 If applicable, prepare Notice of Intent (NOI) and deliver to Client to execute. Client to submit NOI to permit authority.
- 4.4 Coordinate with Client's legal staff to prepare easements and ROW documents for Client to negotiate and execute. Stockwell to assist Client and attend property owner meetings as requested (estimated at one meeting per property).
- 4.5 Perform Internal Quality Assurance Procedures.
- 4.6 Submit three copies of construction documents and Stockwell's opinion of probable construction cost to Client for review.
- 4.7 Submit construction documents to the following entities for comment.
 - 4.7.1 SDDANR.
 - 4.7.2 Private Utility Companies.
- 4.8 Address comments to review documents and incorporate into final deliverables.
- 4.9 Deliver copies of final construction documents to review entities.
- 4.10 Deliver to Client an electronic pdf copy of the finalized construction documents for bidding purposes and Stockwell's opinion of probable construction cost.

Stockwell's services under construction documents phase will be considered complete on the date when Stockwell has delivered to Client the finalized construction documents for bidding.

Deliverables: Opinion of probable construction cost; construction documents for bidding purposes; Notice of Intent; and ROW documents.

Phase 5 | Bidding

- 5.1 Provide bidding documents to prospective bidders.
- 5.2 Maintain a list of plan holders.
- 5.3 Answer any questions arising throughout the bidding process and prepare addendums as required.
- 5.4 Attend the bid opening and administer letting.
- 5.5 Deliver to Client tabulation of bids received and letter of recommendation for awarding the construction contract.
- 5.6 Attend council meeting to present recommendation to Client.

Deliverables: Addendums; tabulation of bids received; and recommendation of award.

Phase 6 | Contracts

- 6.1 Prepare construction agreement and submit to Contractor for signature.
- 6.2 Review construction agreement and accompaniments provided by the Contractor. Client's legal staff to review Contractor's bonds and insurance for authenticity.
- 6.3 Prepare Contractor's notice to proceed.
- 6.4 Deliver paper copies of contract documents for Client to execute and distribute to Contractor and other respective agents.

Deliverables: Executed contract documents; and contractor's notice to proceed.

Phase 7 | Pre-Construction

7.1 Assist Client in procuring material testing services. Material testing agent will be hired directly by Client. Client is responsible for paying the cost of material testing. Stockwell is not responsible for any impact on Client's Project caused by failing tests. Stockwell is entitled to rely on the accuracy of the information and services furnished by Client and its testing firm.



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- 7.2 Prepare conformed set of construction documents. Conformed set to include notes of modifications made by addenda for the convenience of the Client's Contractor. Conformance set shall not supersede or substitute contract documents of the construction contract.
- 7.3 Review and make comment on shop drawings or other product submittals from contractor.
- 7.4 Schedule and conduct preconstruction meeting. Stockwell to notify contractor and private utilities of the meeting time and location, prepare an agenda, and distribute minutes to attendees.

Deliverables: Preconstruction meeting minutes.

Phase 8 | Construction Administration

- 8.1 Mark removal limits of appropriate items.
- 8.2 Document conditions of project Site prior to construction beginning by means of video.
- 8.3 Observe construction activities when significant work is done to determine generally if the contractor is proceeding in accordance with the contract documents. Based on site visit, Stockwell will keep Client reasonably informed about the progress and quality of the work completed, and report to Client known deficiencies observed in the work and deviations from the contractor's work schedule. Contractor to adhere to time provisions of the construction contract. Observation services for work activities that exceed the time provisions of the construction contract shall be an additional service.
- 8.4 Maintain site visit reports indicating weather conditions, construction progress, deviations from the contract documents, and other pertinent information.
- 8.5 Prepare biweekly reports documenting general progress on the project and submit to the Client and Contractor.
- 8.6 Attend coordination meetings with Contractor, estimated at biweekly during construction.
- 8.7 Maintain and update the Storm Water Pollution Prevention Plan (SWPPP) as required.
- 8.8 As required under the construction contract, conduct final inspections and deliver to contractor "punch list" of items requiring completion or correction.
- 8.9 Submit to Client certificate of completion, documenting compliance of work with the contract documents and start of Contractor's warranty.
- 8.10 Prepare monthly progress payment request forms for Client and Contractor to execute.
- 8.11 Review change order requests made by Contractor and provide recommendation to Client to approve or deny such claims. Work added to the Contractor's contract resulting in unanticipated effort by Stockwell shall be considered an additional service.
- 8.12 Prepare final change order to reflect as-built quantities and final pay request forms for Client and Contractor to execute.

Deliverables: Change orders; pay requests; biweekly progress reports; certificate of completion; and punch lists.

Phase 9 | Construction Staking

- 9.1 Mark proposed improvements and elevations as shown on the plans.
- 9.2 Reset boundary markers found at the time of survey but are removed during construction.

Phase 10 | Project Closeout

- 10.1 Prepare Notice of Termination (NOT) for Client to execute. Client to submit NOT to permit authority.
- 10.2 Survey as-built locations and elevations of utility appurtenances accessible at ground surface.
- 10.3 Prepare and deliver record drawings to Client. Record drawings to convey significant changes to the construction documents.

Deliverables: Notice of termination; and record drawings.



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Additional Services

A non-comprehensive outline of additional services and exclusions from Stockwell's proposal are listed below. If authorized in writing by Client, Stockwell will furnish additional services over and above the amount set forth by this agreement. Compensation for additional services will be at Stockwell's current hourly rates or otherwise as mutually agreed upon by both parties.

- Geotechnical or other exploratory services
- Materials Testing
- Coordinating and Negotiating Land Acquisitions
- Title search of properties
- Assessment roll
- Public Meetings
- Change Order Work

End Scope of Services







